

What is claimed is:

1. A method of manufacturing a CRT comprising the steps of:

-providing an envelope with an interior surface and an exterior surface, said envelope

5 including a faceplate having a luminescent screen on said interior surface thereof, a neck for supporting an electron gun, a funnel connecting said neck and said faceplate;

-flowcoating a flowcoating formulation on a portion of said interior surface of said funnel and on an interior portion of said neck, said flowcoating formulation comprises metal oxide, graphite, a silicate, a copolymer, surfactant and water;

10 -drying said flowcoating formulation on said portion of said interior surface of said funnel and on said interior portion of said neck, thereby forming a conductive coating; and

15 -sealing a mount containing said electron gun to said neck, said electron gun having an anode in electrical contact with said conductive coating.

2. The method of claim 1, wherein the copolymer is a maleic copolymer.

20 3. The method of claim 1, wherein the metal oxide is iron oxide or titanium dioxide.

4. The method of claim 1, wherein the copolymer is at 1-5 weight percent and the metal oxide at 9-22 weight percent.

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5. The method of claim 4, wherein the copolymer is a maleic copolymer.

6. The method of claim 4, wherein the metal oxide is iron oxide or titanium dioxide.

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7. The method of claim 1, wherein the flowcoating formulation is formed by diluting a concentrated formulation including the following components:

the graphite at 4-7 wt. %;
iron oxide as the metal oxide being at 9-22 wt. %;
maleic copolymer at the copolymer at 1-5 wt. %;
caustic material at 1-6 wt. %;
potassium silicate as the silicate at 27-46 wt. %;
the surfactant at 1-5 wt. %; and
water at 20-54 wt. %.

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8. The method of claim 7, wherein the flowcoating formulation was formed by
diluting the concentrated formulation such that the concentration of non-aqueous component
is 5 to 30 % less than that of the concentrated formulations.

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9. A formulation for flowcoating comprising metal oxide, graphite, a silicate, a
copolymer, surfactant and water.

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10. The formulation in claim 9, wherein the formulation is a dispersion in
concentrated form comprising

graphite at 4-7 wt. %;
metal oxide at 9-22 wt. %;
copolymer at 1-5 wt. %;
caustic material at 1-6 wt. %;
silicate at 27-46 wt. %;
surfactant at 1-5 wt. %; and
water at 20-54 wt. %;

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or a dispersion in diluted form comprising

graphite at 2.8-6.65 wt. %,
metal oxide at 6.3-20.9 wt. %,
copolymer at 0.7-4.75 wt. %,
caustic material at 0.7-5.7 wt. %,
silicate at 18.9-43.7 wt. %,
surfactant at 0.35-4.75 wt. %, and
water at 21-70.2 wt. %.

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